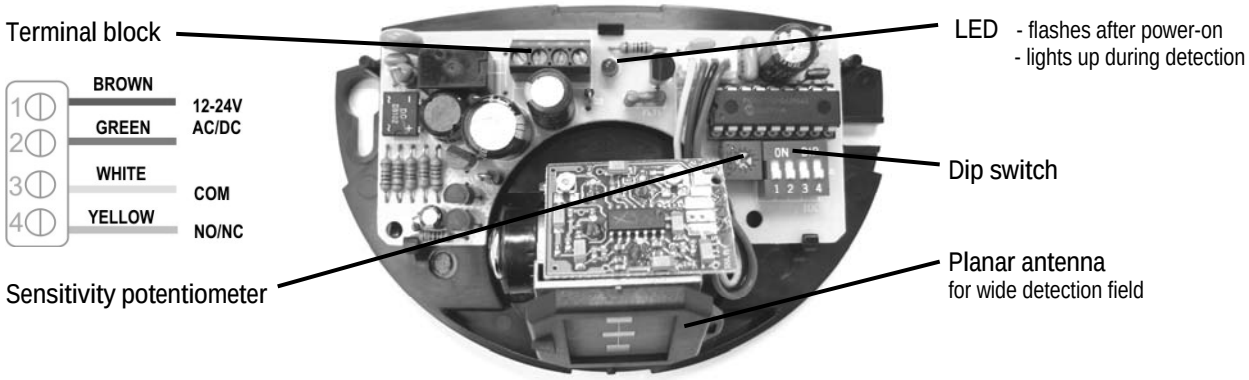
BFR2
USER'S GUIDE

BIDIRECTIONAL MOTION SENSOR FOR AUTOMATIC DOORS

1 General information

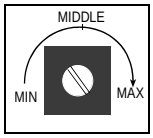


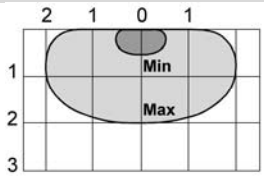
2 Adjustments

1 Dip switch settings

ON DIP 1 2 3 4	DIP SWITCH 1 Detection mode	DIP SWITCH 2 Relay configuration	DIP SWITCH 3 MTF-mode	DIP SWITCH 4 Immunity
▼ OFF	Not used	Active output	Not used	Normal immunity
▲ ON		Passive output		Increased immunity

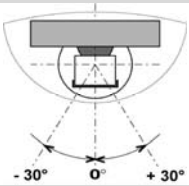
2 Size of the sensing field: sensitivity settings

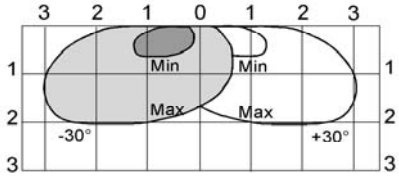




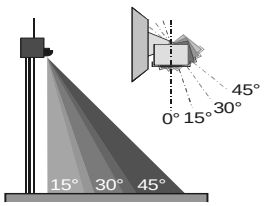
vertical angle: 30°, mounting height: 2.2m

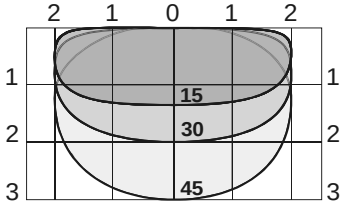
3 Position of the sensing field: lateral angle of the planar antenna





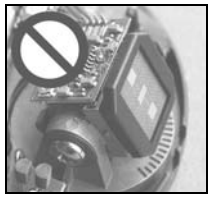
4 Depth of the sensing field: vertical angle of the planar antenna





sensitivity : maximum

3 Installation tips

				
Avoid vibrations!	Do not cover the sensor!	Avoid moving objects in proximity of the sensor!	Avoid HF lamps or fluorescent lighting in proximity of the sensor!	Avoid touching electronics!

4 Troubleshooting

SYMPTOMS	PROBABLE CAUSES	CORRECTIVE ACTION
The door will not open and no red LED lights up.	The sensor power is off.	Check the wiring and the power supply.
The door opens and closes constantly.	The sensor "sees" the door moving. When closing, the door creates vibrations picked up by the sensor.	Increase the tilt angle and/or reduce the sensitivity. Make sure that the sensor is correctly fixed. Increase the immunity (dip switch 4: ON). Reduce the sensitivity.
The door will not close. Red LED is OFF.	ON-OFF switch at door control is in wrong position or faulty. Improper output configuration.	Make sure that the ON-OFF switch for the door is in the ON or AUTOMATIC position. Check the output configuration setting on each sensor connected to the door operator.
It rains and the sensor detects for no apparent reason.	The sensor detects the motion of the rain drops.	Increase the immunity and/or decrease the sensitivity.

5 Technical specifications

Technology	: microwave and microprocessor
Transmitter frequency	: 24.175 GHz
Transmitter radiated power	: <20 dBm EIRP
Transmitter power density	: < 5mW/cm²
Maximum mounting height	: 3m
Tilt angles	: 0° to 90° vertical and -30° to + 30° lateral
Detection field (mounting height=2.2m)	: 4m (W) x 2m (D)
Detection mode	: motion
Minimum speed	: 5 cm/s (measured in the sensor axis)
Supply voltage	: 12V to 24V AC/DC +30% / -10%
Mains frequency	: 50 to 60 Hz
Power consumption	: < 2W (VA)
Output relay (free of potential change-over contact)	
Max. contact voltage	: 42V AC- 60V DC
Max. contact current	: 1A (resistive)
Max. switching power	: 30W (DC) / 60VA (AC)
Hold time	: 0.5s
Temperature range	: -20°C to +55°C
Degree of protection	: IP54
Norm Conformity	: R&TTE 1999/5/EC; EMC 89/336/EEC
Material	: ABS
Color of housing	: anthracite grey, aluminum finish, white
Dimensions	: 120mm (W) x 80mm (H) x 50mm (D)
Weight	: 0.215kg
Length of cable	: 2.5m

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